

REMARKS / ARGUMENTS

Status of Claims

Claims 1-17 are pending in the application and stand rejected. Applicant has canceled Claims 2-4 and 14, and has amended Claims 1, 5, 7-12 and 15, leaving Claims 1, 5-13 and 15-17 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §102(b)

Claims 1-12 and 14-17 stand rejected under 35 U.S.C. §102(b) as being anticipated by Ichikawa et al. (U.S. Patent No. 5,595,581, hereinafter Ichikawa).

Applicant traverses this rejection for the following reasons.

Applicant respectfully submits that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, *in a single prior art reference.*” *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, “[t]he identical invention must be shown in as complete detail as is contained in the *** claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Furthermore, the single source must disclose all of the claimed elements “*arranged as in the claim.*” *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 716, 223 U.S.P.Q. 1264, 1271 (Fed. Cir. 1984) (Emphasis added). Missing elements may not be supplied by the knowledge of one skilled in the art or the disclosure of another reference. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780, 227 U.S.P.Q. 773, 777 (Fed. Cir. 1985).

Applicant has amended independent Claim 1 to include language from Claims 2-4, and to now recite, inter alia,

“... wherein said first end-plug has a greater porosity than said second end-plug;

wherein the pores of said first end-plug are sized to trap exhaust particulates and permit leakage of ash particles; and

wherein the pores of said internal walls and said second end-plug are sized to trap both exhaust particulates and ash particles.”

Applicant has amended independent Claim 10 to include language from Claim 11, and to now recite, inter alia,

“...wherein the pores of said first end-plug are sized to trap exhaust particulates and permit leakage of ash particles; and

wherein the pores of said internal walls and said second end-plug are sized to trap both exhaust particulates and ash particles.”

Applicant has amended independent Claim 12 to include language from Claim 14, and to now recite, inter alia,

“...trapping exhaust byproducts of carbonaceous matter and ash particles at the porous walls and the end plugs, trapping exhaust byproducts of carbonaceous matter at the porous plugs, and passing ash particles through the porous plugs...”

Applicant has also amended dependent Claim 5 to now recite, inter alia,

“...wherein the pore size of said first end-plug is equal to or greater than about 30 micrometers, and ***the pore size of said internal walls and said second end-plug are less than about 30 micrometers.”***

Applicant has also amended dependent Claim 8 to now recite, inter alia,

“...wherein the total surface area of said first end-plugs is ***less than about 1/240*** the total surface area of said internal walls.”

Applicant has also amended dependent Claim 11 to now recite, inter alia,

“...wherein the total surface area of said first end-plugs is ***less than about 1/240*** the total surface area of said internal walls.”

Applicant has also amended dependent Claim 15 to now recite, inter alia,

“...said trapping further comprises ***trapping ash particles at the porous walls having a pore size of less than about 30 micrometers...”***

Dependent claims inherit all of the limitations of the respective parent claim and any intervening claim.

No new matter has been added as antecedent support for the claim amendments may be found in the specification as originally filed, such as at Paragraphs [0013-0014] and [0018], for example.

In comparing Ichikawa with the instant invention, Applicant respectfully submits that Ichikawa is missing each and every element of the claimed invention arranged as claimed, and therefore cannot be anticipatory.

The Examiner alleges that Ichikawa discloses “trapping ash particles at the porous walls and end plugs” by referencing Figs. 1-3 and column 1, line 62 to column 9, line 27. Paper 021805, page 5.

Applicant respectfully disagrees.

At column 1, line 62 to column 9, line 27, Applicant finds Ichikawa to disclose a honeycomb structure with partition walls 20 and second sealing member 22 having a porosity of 45% (Table 1), and a first sealing member 21 having a porosity of 40-65% (Table 2).

The Examiner remarks that first sealing member 21 passes ash particles. Paper 021805, page 5.

If Applicant were to accept the Examiner’s interpretation of Ichikawa, and absent disclosure in Ichikawa to the contrary, it necessarily follows that second sealing member 22 having a porosity 45% would also pass ash particles, since first sealing member 21 is disclosed as passing ash particles at a porosity of 45% (40-65% from Table 2).

Accordingly, Ichikawa is absent disclosure of each and every element of independent Claims 1, 10 and 12 arranged as claimed.

Regarding Claims 5, 8, 11 and 15, Applicant submits that Ichikawa does not disclose: *the pore size of the internal walls and the second end-plug being less than about 30 micrometers*; the total surface area of the first end-plugs being *less than about 1/240* the total surface area of the internal walls; and *trapping ash particles at the porous walls having a pore size of less than about 30 micrometers*.

Absent anticipatory disclosure in Ichikawa of each and every element of the claimed invention arranged as claimed, Ichikawa cannot be anticipatory.

In view of the amendment and foregoing remarks, Applicant submits that Ichikawa does not separately disclose each and every element of the claimed invention arranged as claimed and therefore cannot be anticipatory. Accordingly, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §102(b) have been traversed, and requests that the Examiner reconsider and withdraw of these rejections.

Rejections Under 35 U.S.C. §103(a)

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ichikawa.

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Claim 13 depends from Claim 12, and as previously discussed, Applicant has amended Claim 12 to overcome the rejection under 35 U.S.C. §102(b).

In addition to the foregoing remarks, Applicant respectfully submits that Ichikawa does not teach or suggest each and every element of the claimed invention as amended, and therefore cannot properly be used to establish a prima facie case of obviousness.

Furthermore, at Paragraph [0018] Applicant discloses an advantage of the claimed invention where the porosity of the porous wall 240 and the end-plugs 290 are such that they do not permit leakage of ash particles, which is an advantage not recognized by Ichikawa, as evidenced by the overlapping ranges of porosity taught by Table-1 and Table-2. Accordingly, Applicant submits that Ichikawa does not recognize an advantage

only recognized by the instant invention, and teaches a substantially different invention to the claimed invention.

In view of the foregoing, Applicant submits that Ichikawa fails to teach or suggest each and every element of the claimed invention and discloses a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.


The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 06-1130.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above identified Deposit Account.

Respectfully submitted,

CANTOR COLBURN LLP

Applicant's Attorneys

By: 

David Arnold
Registration No: 48,894
Customer No. 23413

Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929
Fax: (860) 286-0115

AMENDMENTS TO THE DRAWINGS

Please amend Figure 2 to include the reference numerals 230 (inlet channels) and 310 (first end). Please amend Figure 3 to include the leader line from reference numeral 260 (inlet port) to the drawing element. No new matter has been added as antecedent support may be found in the application as originally filed. A replacement drawing sheet is provided herewith.